# TEST REPORT

| | | |
|---|---|---|
| **Product** | : | Aikri6490 |
| **Trade mark** | : | N/A |
| **Model/Type reference** | : | Aikri-64X-90AS-8-LGA,<br>Aikri-64X-90LS-8-LGA |
| **Serial Number** | : | N/A |
| **Report Number** | : | EED32R81711605 |
| **Date of Issue** | : | Feb. 12, 2026 |
| **Product Class** | : | Item 19-3 of Article 2 Paragraph 1,<br>MIC Notice No.88 Appendix No.45 |
| **Test result** | : | PASS |

Prepared for:

**eInfochips Inc**
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Prepared by:

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| | | | |
|---|---|---|---|
| Compiled by: | Lucas Lu | Reviewed by: | Keven Tan |
| Approved by: | Aaron Ma | Date: | Feb. 12, 2026 |

Check No.: 6534150925

# 1 Test Summary

| Test Item | Test Requirement | Limit/Severity | Result |
|---|---|---|---|
| Number of channels or channel separation | Item 19-3 of Article 2 Paragraph 1 | 7 | PASS |
| Tolerance of frequency | Item 19-3 of Article 2 Paragraph 1 | $20\times10^{-6}$ or less | PASS |
| Occupied Bandwidth | Item 19-3 of Article 2 Paragraph 1 | For BW=20MHz:OFDM≦20MHz; Others≦18MHz<br>For BW=40MHz:OFDM≦40MHz<br>For BW=80MHz:OFDM≦80MHz<br>For BW=160MHz:OFDM≦160MHz | PASS |
| Tolerance of adjacent channel leakage power and out-band leakage power | Item 19-3 of Article 2 Paragraph 1 | Adjacent channel leakage power<br>See page 16<br>Out-band leakage power<br>EIRP : refer to Item 19-3 of Article 2 Paragraph 1 Table 1 | PASS |
| Antenna Power | Item 19-3 of Article 2 Paragraph 1 | OFDM<br>20MHz sys: 10mW/MHz or less<br>40MHz sys: 5mW/MHz or less<br>80MHz sys: 2.5mW/MHz or less<br>160MHz sys: 1.25mW/MHz or less<br>Tolerance : +20%,-80% | PASS |
| Tolerance of unwanted emission intensity(conducted) | Item 19-3 of Article 2 Paragraph 1 | Article 2 Paragraph 1 of Item 19-3 | N/A |
| Interference prevention capability | Item 19-3 of Article 2 Paragraph 1 | Article 49 | N/A |
| Carrier sense capability | Item 19-3 of Article 2 Paragraph 1 | Article 49 | PASS |
| RF accessibility | Item 19-3 of Article 2 Paragraph 1 | Article 49 | N/A |
| Burst Length | Item 19-3 of Article 2 Paragraph 1 | 8ms or less | PASS |
| Limit of secondary radiated emissions(conducted) | Item 19-3 of Article 2 Paragraph 1 | (1) Below 1GHz : 4nW<br>(2) 1GHz or higher : 20nW | PASS |

Remark:
EUT: In this whole report EUT means Equipment Under Test.
Tx: In this whole report Tx (or tx) means the product in transmitting status.
Rx: In this whole report Rx (or rx) means the product in receiving status.
RF: In this whole report RF means Radiated Frequency.
DS: Direct spreading
FH: Frequency hopping
OFDM: Orthogonal frequency division multiplexing.

Model No.: Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA

Only the model Aikri-64X-90AS-8-LGA was tested, Their electrical circuit design, layout, components used, and internal wiring are identical, Only the software version and model names are different. The mentioned Software versions are for two different Operating System. RF Tx power is same in both the Operating System.

| No. | Model name | Software version | Operating System |
|---|---|---|---|
| 1 | Aikri-64X-90AS-8-LGA | QCS6490_AND.13.0.0.EI.1.3.6 | Android |
| 2 | Aikri-64X-90LS-8-LGA | QCS6490_QLI.1.2.0.EI.1.1.0 | Linux |

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# 3 General Information

## 3.1 Client Information

| | |
|---|---|
| Applicant: | eInfochips Inc |
| Address of Applicant: | 181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110 |
| Manufacturer: | eInfochips Inc |
| Address of Manufacturer: | 181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110 |
| Factory: | e Infochips Private Limited |
| Address of Factory: | Block-E, Ratna, 3rd Eye Voice, IT/ITES SEZ, Calica Construction and Impex Pvt. Ltd., Village: Ognaj, Taluka: Daskroi, Ahmedabad - 380060, Gujarat, India |

## 3.2 General Description of EUT

| | |
|---|---|
| Product Name: | Aikri6490 |
| Model No.(EUT): | Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA |
| Test Model No.: | Aikri-64X-90AS-8-LGA |
| Trade mark: | N/A |
| EUT Supports Radios application: | 5.15-5.25GHz |
| Operating Frequency: | 5.15-5.25GHz |
| Rated power: | 5.15-5.25GHz:<br>4.50mW/MHz (W52 Band_802.11a)<br>4.50mW/MHz (W52 Band_802.11n-HT20)<br>2.5mW/MHz (W52 Band_802.11n-HT40)<br>4.00mW/MHz (W52 Band_802.11ac-VHT20)<br>2.20mW/MHz (W52 Band_802.11ac-VHT40)<br>1.50mW/MHz (W52 Band_802.11ac-VHT80)<br>4.50mW/MHz (W52 Band_802.11ax-HE20)<br>2.50mW/MHz (W52 Band_802.11ax-HE40)<br>1.00mW/MHz (W52 Band_802.11ax-HE80) |
| Type of Modulation: | IEEE for 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK)<br>IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM)<br>IEEE for 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)<br>IEEE for 802.11ax: OFDMA (1024QAM,64QAM, 16QAM, QPSK, BPSK)<br>EUT supports full RU. |
| Transmit Data Rate: | IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br>802.11n(HT20): MCS0-MCS15<br>802.11n(HT40): MCS0-MCS15<br>802.11ac(VHT20): MCS0-MCS8<br>802.11ac(VHT40): MCS0-MCS9<br>802.11ac(VHT80): MCS0-MCS9<br>802.11ax(HE20): MCS0-MCS11<br>802.11ax(HE40): MCS0-MCS11<br>802.11ax(HE80): MCS0-MCS11 |
| Number of subcarriers: | 802.11a: 3/MHz<br>802.11n (HT20):3/MHz |

| | |
|---|---|
| | 802.11n (HT40):3/MHz<br>802.11ac (VHT20):3/MHz<br>802.11ac (VHT40):3/MHz<br>802.11ac (VHT80):3/MHz<br>802.11ax (HE20):13/MHz<br>802.11ax (HE40):13/MHz<br>802.11ax (HE80):13/MHz |
| Antenna Type: | FPC antenna |
| Antenna gain : | 3.4dBi |
| Function: | TX:☒ SISO RX:☒ MIMO |
| Test Power Grade: | Default |
| Test Software of EUT: | QRCT.exe |
| Power Supply: | DC 3.7V |
| Test Voltage: | DC 3.7V |
| Sample Received Date: | Sep. 15, 2025 |
| Sample tested Date: | Sep. 15, 2025 to Feb. 11, 2026 |
| Note: The product's transmission function only supports a single antenna (Antenna Port 2), while the reception function supports dual antennas. | |

## 3.3 EUT Test Environment Recorded

| | |
|---|---|
| Temperature: | 25°C |
| Humidity: | 54% RH |
| Atmospheric Pressure: | 1010mbar |

## 3.4 Description of Support Units

The EUT has been tested independently.

## 3.5 Test Location

All tests were performed at:
Centre Testing International Group Co., Ltd.
Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.

## 3.6 Measurement Uncertainty (95% confidence levels, k=2)

| No. | Item | Measurement Uncertainty |
|---|---|---|
| 1 | Frequency Error | 10Hz |
| 2 | Occupied Bandwidth | 10kHz |
| 3 | Antenna Power | 0.55dB |
| 4 | Spurious Emissions | 0.46dB(30MHz-1GHz) |
| | | 0.55dB(1GHz-18GHz) |
| 5 | Carrier sense capability | 1.0dB |
| 6 | Temperature test | 0.64°C |
| 7 | Humidity test | 3.8% |
| 8 | DC and low frequency voltages test | 0.026% |

# 4 Equipment List

| RF test system | | | | | | |
|---|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial Number | Cal. Date (mm-dd-yyyy) | Cal. Due date (mm-dd-yyyy) | Calibration body |
| Spectrum Analyzer | Keysight | N9010A | MY54510339 | 12-05-2024<br>11-25-2025 | 12-04-2025<br>11-24-2026 | CTIMT |
| Spectrum Analyzer | R&S | FSVS3044 | 101509 | 02-14-2025 | 02-13-2026 | LISAI |
| Spectrum Analyzer | R&S | FSW43 | 102978 | 08-11-2025 | 08-10-2026 | LISAI |
| Signal Generator | Keysight | N5182B | MY53051549 | 11-30-2024<br>11-13-2025 | 11-29-2025<br>11-12-2026 | CTIMT |
| Signal Generator | Agilent | N5181A | MY46240094 | 11-30-2024<br>11-25-2025 | 11-29-2025<br>11-24-2026 | CTIMT |
| DC Power | Keysight | E3642A | MY56376072 | 11-30-2024<br>11-13-2025 | 11-29-2025<br>11-12-2026 | CTIMT |
| Communication test set | R&S | CMW500 | 169004 | 03-03-2025 | 03-02-2026 | CTIMT |
| RF control unit(power unit) | JS Tonscend | JS0806-2 | 24I80620925 | 07-21-2025 | 07-20-2026 | CTIMT |
| Wi-Fi 7GHz Band Extendder | JS Tonscend | TS-WF7U2 | 2206200002 | 05-12-2025 | 05-11-2026 | LISAI |
| high-low temperature test chamber | Dong Guang Qin Zhuo | LK-80GA | QZ20150611879 | 11-30-2024<br>11-13-2025 | 11-29-2025<br>11-12-2026 | CTIMT |
| Temperature/ Humidity Indicator | biaozhi | HM10 | 1804186 | 05-26-2025 | 05-25-2026 | CTIMT |
| BT&WI-FI Automatic test software | JS Tonscend | JS1120-3 | V3.6.21 | --- | --- | --- |
| Digital multimeter | FLUKE | 17B MAX | 59545050WS | 09-19-2024<br>10-15-2025 | 09-18-2025<br>10-14-2026 | CTIMT |

**Remark:**

CTI: Centre Testing International Group Co., Ltd
Adress:Build C,Hongwei Industrial Zone, Baoan 70 District, Shenzhen, China
CTIMT: CTI MEASUREMENT AND TESTING CO.,LTD.
Address :Building B and C, Taohuayuan Sci-Tech Innovation Park, Tiegang Community, Xixiang Sub-district, Bao'an District, Shenzhen, Guangdong, China
LISAI: Guangzhou LiSai Metrology & Test Co.,Ltd.
Address:No.8.South Street Shi Ji Institute Guangzhou.Guangdong.China

(a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in

Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.

(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to(c).

From JRL Article 24-2, paragraph 4, Item 2

**Notice: Calibration duration for above equipment is 1 year.**

# 5 Radio Technical Requirements Specification

**Table 1: 5 GHz band low-power data communication system (1) (Item 19-3 of Article 2 Paragraph 1)**

| Test Item | Technical standard |
|---|---|
| Assigned frequency or designated frequency | W52: 5180, 5200, 5220, 5240, 5190, 5230, 5210MHz<br>W52+W53: 5250 |
| Communication method | One-way communication, simplex, semi-duplex, or duplex operation of digital signal transmission including spread spectrum |
| Number of channels or channel separation | 7 |
| Tolerance of frequency ($\times 10^{-6}$) | $20\times 10^{-6}$ |
| Tolerance of occupied bandwidth | For BW=20MHz:OFDM≦20MHz; Others≦18MHz<br>For BW=40MHz:OFDM≦40MHz<br>For BW=80MHz:OFDM≦80MHz<br>For BW=160MHz:OFDM≦160MHz |
| Antenna power | OFDM<br>20MHz sys: 10mW/MHz or less<br>40MHz sys: 5mW/MHz or less<br>80MHz sys: 2.5mW/MHz or less<br>160MHz sys: 1.25mW/MHz or less<br>Tolerance : +20%,-80% |
| EIRP | 20MHz sys: 10mW/MHz or less<br>40MHz sys: 5mW/MHz or less<br>80MHz sys: 2.5mW/MHz or less<br>160MHz sys: 1.25mW/MHz or less |
| Tolerance of spurious emission intensity | 2.5μW/MHz |
| Tolerance of adjacent channel leakage power and out-band leakage power | Adjacent channel leakage power<br>See page 14<br>Out-band leakage power<br>See page 15 |
| Transmission burst length | 8ms or less |
| Limit of secondary radiated emissions | (1) Below 1GHz : 4nW<br>(2) 1GHz - 10GHz : 20nW<br>(3) 10GHz or higher : 20nW |
| Interference prevention function | Shall have the function of automatic transmission or reception of identification code. |
| Structure | Shall be of the structure that the RF and modulator sections excluding antenna cannot easily be opened. |
| Note | DS: Direct spread<br>OFDM: Orthogonal frequency division multiplexing |

Note: The Technical Standards described here do not cover all of the regulated items.

## 5.1 Transmitter Requirements

### 5.1.1 EUT test voltage and Frequency

#### 5.1.1.1 EUT test voltage

| EUT test voltage | | |
|---|---|---|
| **Power Supply:** | DC 3.7V | |
| **Test voltage require:** | Supply the rated voltage and the rated voltage ±10% to power supply. However, If the fluctuation of input voltage to the circuit of RF unit (except power supply) of test equipment is under ±1%, when input voltage from external power supply to the test equipment is fluctuated by ±10%: Conduct the test with the rated voltage only. | |
| **Power Supply result:** | The measurement result of the voltage fluctuation at RF circuit when DC 3.7V +/- 10%. | |
| | DC Input | RF circuit |
| | 3.70V | 3.300V |
| | 4.07V | 3.300V |
| | 3.33V | 3.300V |

### 5.1.1.2 Test frequency

| | |
|---|---|
| Test frequencies: | If the EUT can be set to 3 of more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L,M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies. |

| Frequency range over which device operates | Number of frequencies | Location in the range of operation |
|---|---|---|
| 1 MHz or less | 1 | Middle |
| 1 to 10 MHz | 2 | 1 near top and 1 near bottom |
| More than 10 MHz | 3 | 1 near top. 1 near middle and 1 near bottom |

EUT channels and frequencies list:

| 802.11a 20MHz<br>802.11n 20MHz<br>802.11ac 20MHz<br>802.11ax 20MHz | | 802.11n 40MHz<br>802.11ac 40MHz<br>802.11ax 40MHz | | 802.11ac 80MHz<br>802.11ax 80MHz | |
|---|---|---|---|---|---|
| W52 | | W52 | | W52 | |
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 36 | 5180 | 38 | 5190 | 42 | 5210 |
| 40 | 5200 | 46 | 5230 | N/A | N/A |
| 44 | 5220 | N/A | N/A | N/A | N/A |
| 48 | 5240 | N/A | N/A | N/A | N/A |

Test channel:

| Test mode | Test channel/frequency(MHz) |
|---|---|
| Mode 1: IEEE 802.11a W52 mode | CH36/5180, CH40/5200, CH 48/5240 |
| Mode 2: IEEE 802.11n/ac/ax 20MHz W52 mode | CH36/5180, CH40/5200, CH 48/5240 |
| Mode 3: IEEE 802.11n/ac/ax 40MHz W52 mode | CH38/5190, CH46/5230 |
| Mode 4: IEEE 802.11ac/ax 80MHz W52 mode | CH42/5210 |

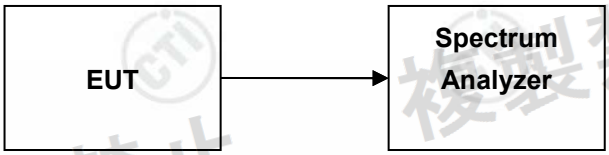
### 5.1.2 Antenna Requirement

| Standard requirement | |
|---|---|
| Applicable for equipment with an antenna terminal, including testing terminals) If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture. | |
| **EUT Antenna** | Refer to internal photos. |
| The antenna is FPC Antenna and no consideration of replacement. The best case gain of the antenna is 3.4dBi. | |
| **Result:** An antenna connector is available, all relevant tests will be carried out conducted. | |

### 5.1.3 Tolerance of frequency

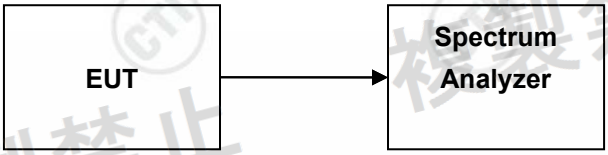
| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Enter the unmodulation mode for the product. Test in Channel lowest, middle and highest, keep in continuously transmitting status. |
| **Test Configuration:** | |
| | |
| **Test Conditions:** | Frequency Counter or Spectrum Analyzer is used for measurement. |
| **EUT conditions:** | Modulation/Spread/Hopping off, CW Tx<br>If EUT does not accept “Modulation OFF” mode in the measurement, you may use “Modulation ON” mode. In that case you can use the Max power Frequency as the measuring results. |
| **Spectrum Analyzer conditions:** | Frequency: Test Frequency<br>Span 1MHz<br>RBW 10kHz (Modulation OFF),<br>VBW 10kHz (Modulation OFF),<br>Sweep Time Auto<br>Detector mode Positive peak<br>Indication mode Max hold |
| **Technical standard:** | Tolerance of frequency: $\pm 20\times 10^{-6}$ |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

### 5.1.4 Occupied Bandwidth

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).<br>Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
|  | |
| **EUT conditions:** | Modulation/Spread/Hopping on.<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Frequency: Test Frequency<br>Span 40MHz/80MHz/160MHz<br>RBW 300kHz<br>VBW 300kHz<br>Sweep Time Auto<br>detector mode Positive peak<br>Indication mode Max hold<br>OBW 99% |
| **Technical standard:** | For BW=20MHz:OFDM≦20MHz; Others≦18MHz<br>For BW=40MHz:OFDM≦40MHz<br>For BW=80MHz:OFDM≦80MHz<br>For BW=160MHz:OFDM≦160MHz |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

### 5.1.5 Adjacent Channel Power Tolerance

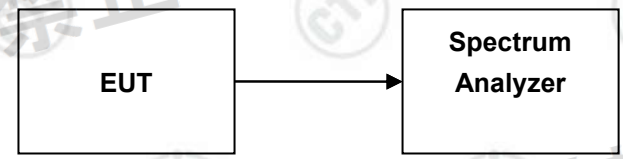
| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |




| | |
|---|---|
| **EUT conditions:** | Modulation/Spread/Hopping on.<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Frequency: Test Frequency<br>RBW 300kHz<br>VBW 300kHz<br>Tx bandwidth 20MHz<br>Adjacent channel bandwidth 20MHz, Channel spacing 20MHz<br>Alternate channel bandwidth 20MHz, Channel spacing 40MHz<br>Sweep Time Auto<br>Detector mode Positive peak<br>Indication mode Max hold |
| **Technical standard:** | 20MHz system (OB: below 20MHz)<br>(1) Mean power of ±10MHz; bandwidth at 20MHz; detuning :- 25dBc<br>(2) Mean power of ±10MHz; bandwidth at 40MHz; detuning : -40dBc<br>40MHz system (OB: over 20, below 40MHz)<br>(1) Mean power of ±20MHz; bandwidth at 40MHz; detuning : -25dBc<br>(2) Mean power of ±20MHz; bandwidth at 80MHz; detuning : -40dBc<br>80MHz system (OB: over 40, below 80MHz)<br>Mean power of ±40MHz; bandwidth at 80MHz; detuning : -25dBc |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset.

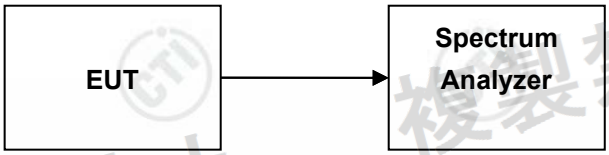
### 5.1.6 Out-Band Emissions Power

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
|  | |
| **EUT conditions:** | Modulation/Spread/Hopping on.<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Step 1<br>All spurious are measured by peak mode.<br>Step 2:<br>Frequency: Spurious Frequency<br>RBW 1MHz<br>VBW 1MHz<br>Sweep Time Auto<br>Detector mode Sample<br>Indication mode Max hold |
| **Technical standard:** | OB: ≤18MHz<br>5142MHz or less ≤2.5μW/MHz<br>5142-5150MHz ≤15μW/MHz<br>5250-5251MHz ≤$10^{1-(f-9)}$mW/MHz<br>5251-5260MHz ≤$10^{-1-(8/90)(f-11)}$mW/MHz<br>5260-5266.7MHz ≤$10^{-1.8-(6/50)(f-20)}$mW/MHz<br>5266.7MHz or more ≤2.5μW/MHz<br>Note:f=MHz,difference from 5240MHz.<br><br>OB: 18-20MHz<br>5135-5142MHz ≤2.5μW/MHz<br>5142-5150MHz ≤15μW/MHz<br>5250-5250.2MHz ≤$10^{1-(8/3)(f-9.75)}$mW/MHz<br>5250.2-5251MHz ≤$10^{1-(f-9)}$mW/MHz<br>5251-5260MHz ≤$10^{-1-(8/90)(f-11)}$mW/MHz<br>5260-5266.7MHz ≤$10^{-1.8-(6/50)(f-20)}$mW/MHz<br>5266.7MHz or more ≤2.5μW/MHz<br>Note:f=MHz,difference from 5240MHz.<br><br>OB: 20-40MHz<br>5141.6MHz or less ≤2.5μW/MHz<br>5141.6-5150MHz ≤15μW/MHz<br>5250-5251MHz ≤$10^{-(f-20)+\log(1/2)}$mW/MHz<br>5251-5270MHz ≤$10^{-(8/190)(f-21)-1+\log(1/2)}$mW/MHz<br>5270-5278.4MHz ≤$10^{-(3/50)(f-40)-1.8+\log(1/2)}$mW/MHz<br>5278.4MHz or more ≤2.5μW/MHz<br>Note:f=MHz,difference from 5230MHz.<br><br>OB: 40-80MHz<br>5123.2MHz or less≤2.5μW/MHz<br>5123.2-5150MHz ≤15μW/MHz<br>5250-5251MHz ≤$10^{-(f-40)+\log(1/4)}$mW/MHz<br>5251-5290MHz ≤$10^{-(8/390)(f-41)-1+\log(1/4)}$mW/MHz<br>5290-5296.7MHz ≤$10^{-(3/100)(f-80)-1.8+\log(1/4)}$mW/MHz<br>5296.7MHz or more ≤2.5μW/MHz<br>Note:f=MHz,difference from 5210MHz.<br><br>OB: 160MHz<br>5099.6MHz or less≤2.5μW/MHz |

| | |
|---|---|
| | 5099.6-5150MHz ≤15μW/MHz<br>5350-5400.4MHz ≤15μW/MHz<br>5400.4MHz or more≤2.5μW/MHz |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset. .

### 5.1.7 Antenna Power

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
|  | |
| **EUT conditions:** | Modulation/Spread/Hopping on<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Step<br>Frequency: Test Frequency<br>Span 40MHz/80MHz/160MHz<br>RBW 1MHz<br>VBW 1MHz<br>Sweep Time Auto<br>Detector mode Positive peak<br>Indication mode Max hold<br>Step 2<br>Frequency: Test Frequency<br>Span: 0MHz<br>RBW: 1MHz/3MHz<br>VBW: 1MHz/3MHz<br>Sweep: Time Auto<br>Detector mode: RMS<br>Indication mode: Clear Write |
| **Technical standard:** | OFDM<br>20MHz sys: 10mW/MHz or less<br>40MHz sys: 5mW/MHz or less<br>80MHz sys: 2.5mW/MHz or less<br>160MHz sys: 1.25mW/MHz or less<br>Tolerance : +20%,-80% |
| **E.I.R.P.** | ≤10mW/MHz (20MHz sys)<br>≤5mW/MHz (40MHz sys)<br>≤2.5mW/MHz (80MHz sys)<br>≤1.25mW/MHz (160MHz sys) |

| | |
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| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

Note: The cable loss have been put into spectrum analyzer as amplitude offset.

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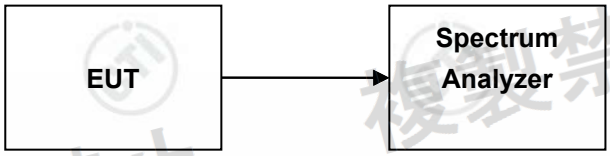
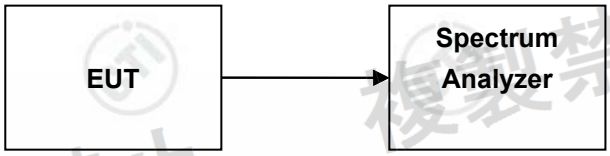
### 5.1.8 Unwanted Emission Strength

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).<br>Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
|  | |
| **EUT conditions:** | Modulation/Spread/Hopping on.<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Step1<br>All spurious are measured from 30MHz to 26 GHz by peak mode.<br>Step 2:<br>Frequency: Spurious Frequency<br>RBW 100kHz (30MHz-1GHz), 1000kHz (over 1GHz)<br>VBW 100kHz (30MHz-1GHz), 1000kHz (over 1GHz)<br>Sweep Time Auto<br>Detector mode Sample<br>Indication mode Max hold |
| **Technical standard:** | 20MHz system<br>OB: below 18MHz:<br>(1) Below 5140MHz, 2.5μW/MHz<br>(2) Over 5360MHz, 2.5μW/MHz<br>OB: over 18MHz, below 19MHz<br>(1) Below 5135MHz, 2.5μW/MHz<br>(2) Over 5365MHz, 2.5μW/MHz<br>40MHz system<br>OB:From 19MHz to 38MHz<br>(1) Below 5100MHz, 2.5μW/MHz<br>(2) Over 5400MHz, 2.5μW/MHz<br>80MHz system<br>OB:From 38MHz to 78MHz<br>(1) Below 5020MHz, 2.5μW/MHz<br>(2) Over 5480MHz, 2.5μW/MHz<br>160MHz system<br>OB:From 78MHz to 158MHz<br>(1) Below 5099.6MHz, 2.5μW/MHz<br>(2) Over 5400.4MHz, 2.5μW/MHz |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

### 5.1.9 Transmission Burst Length

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).<br>Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
|  | |
| **EUT conditions:** | Modulation/Spread/Hopping on.<br>For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal. |
| **Spectrum Analyzer conditions:** | Frequency: Test Frequency<br>Span 0MHz<br>RBW 1MHz,<br>VBW 1MHz,<br>Sweep Time: ≧1ms<br>Detector mode Positive peak<br>Indication mode Max hold |
| **Technical standard:** | Burst length ≤ 8ms |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

### 5.1.10 Interference prevention function

Test Procedure

1)For EUTs capable of automatically transmitting identification data

a. Transmit identification data from EUT to Demodulator

b. Confirm identification data is correctly received by Demodulator

2)For EUTs capable of automatically receiving identification data

c. Transmit identification data from Link Partner to EUT

d. Confirm communication link is established

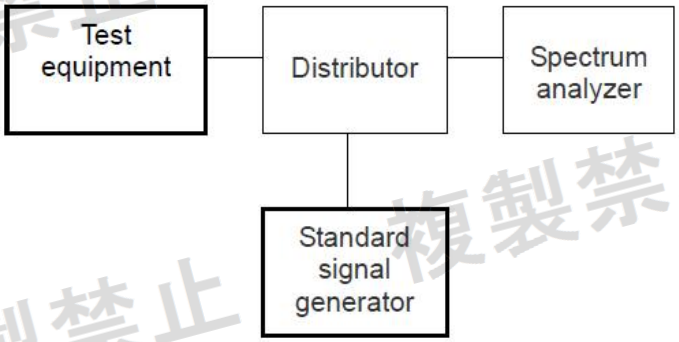
e. Link Partner shall respond by transmitting different identification data back to the EUT

f. Confirm EUT stops transmitting, or confirm EUT recognizes that the two identification data are different

MAC Address:7F:D3:CE:83:26:4D

Test result: The unit does meet the requirements.(PASS)

### 5.1.11 Carrier sense capability

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | The EUT state shall be “normal mode link with wireless router” |
| **Test Configuration:** | |
|  | |
| **Measurement Procedure:** | 1. SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG and power level is (on 22.79+Gr-20*log(F)dBm) (Gr is the antenna gain, F is the transmission frequency).<br>2. Turn off the RF signal of the SG.<br>3. EUT have transmitted the maximum modulation signal and fixed channelize.<br>4. Setting of SA: RBW/VBW=1MHz/1MHz, Span= 50MHz, Sweep time= auto, Sweep mode= continuous, Detect mode=positive peak<br>5. SG RF signal on,<br>6. Record the result,<br>7. SG RF signal off,<br>8. Record the result. |
| **Technical standard:** | EUT shall be stop the transmitted any signal and SG RF signal off. |
| **Test result:** | The unit does meet the requirements (Good).<br>Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

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### 5.1.12 RF accessibility

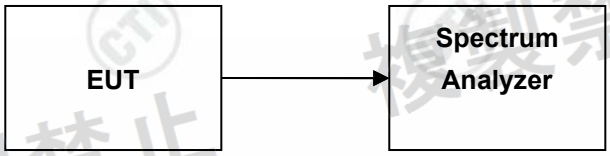
**Standard requirement**

Article 49-20, paragraph 1 (a)
The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

| |
|---|
| ☐ Sealed with special screws. |
| ☐ Plastic chassis is being welded using ultrasonic waves. |
| ☐ Chassis is glued using a special adhesive. |
| ☒ Metal covers are spot-fused. |
| ☐ Cover is specially interlocked. |
| ☐ RF and Modulation components are covered with shielding case and this shielding case is soldered. |
| ☐ Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method. |
| ☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive. |
| ☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued with anon-transparent laminating agent. |
| ☐ RF and Modulation parts are mounted on PCB with surface mount technology, the antenna is printed on PCB, chip is welded on PCB,and there is no any adjustable parts on PCB or adjustable parts are not exposed. |
| Refer to internal photos. |

## 5.2 Receiver Requirements

### 5.2.1 Secondary radiated emissions

| | |
|---|---|
| **Test Requirement:** | Item 19-3 of Article 2 Paragraph 1 |
| **Test Status:** | Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below. |
| **Test Configuration:** | |
| |  |
| **EUT conditions:** | Rx |
| **Spectrum Analyzer conditions:** | Step 1<br>All spurious are measured from 30 MHz to 26 GHz by peak mode.<br>Step 2:<br>Frequency: Spurious Frequency<br>RBW 100kHz (30MHz-1GHz) , 1MHz (over 1GHz)<br>VBW 100kHz (30MHz-1GHz) , 1MHz (over 1GHz)<br>Sweep Time Auto<br>Detector mode Sample<br>Indication mode Max hold |
| **Technical standard:** | (1) Below 1GHz : 4nW<br>(2) 1GHz or higher : 20nW |
| **Test result:** | Refer to Appendix: W5.2 Wi-Fi of Report No. EED32R81711605. |

# 6 PHOTOGRAPHS

Refer to Appendix Photographs of Report No. EED32R81711601.

**Statement**

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;

2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;

3. The result(s) shown in this report refer(s) only to the sample(s) tested;

4. Unless otherwise stated,the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;

5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***